

# Atlantic Richfield Company

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April 8, 2011

## **CERTIFIED – RETURN RECEIPT REQUESTED**

Ms. Jere Johnson  
Remedial Project Manager  
U.S. Environmental Protection Agency Region 9  
75 Hawthorne Street, SFD-9-1  
San Francisco, CA 94105

**Subject: March 2011 Monthly Report, Yerington Mine Site, Lyon County, Nevada: Administrative Order for Remedial Investigation and Feasibility Study (RI/FS), CERCLA Docket No. 9-2007-0005; Administrative Order on Consent, CERCLA Docket No. 09-2009-0010**

Dear Ms. Johnson:

Pursuant to the above referenced orders issued by the U.S. Environmental Protection Agency - Region 9 (EPA), Atlantic Richfield Company (ARC) has prepared the following monthly report for RI/FS and removal action activities at the Yerington Mine Site (Site) during March 2011.

## **March 2011 Activities**

### Site Security and O&M Activities

- Continued routine Site O&M, security and bird deterrent activities including operation of the propane cannons for the Arimetco ponds (with the exception of the VLT Pond, as directed by EPA). Bird guard towers remained active due to accumulated precipitation in the pumpback well system (PWS) evaporation pond. The “wind dancer” bird deterrent continued as planned to be re-located to lessen the possibility of birds becoming habituated to the “wind dancer”.
- Meteoric water remained in two of the PWS evaporation pond cells: North Cell 0.0 feet; Middle Cell = 0.15 feet; South Cell 0.25 feet. The PWS remained inactive during temporary shut-down. Continued monitoring of the evaporation pan located near PW-6.
- Arimetco heap leach fluid management system (FMS): Pond levels: Phase 1 Pond = 4.5 feet; FMS Evaporation Pond = 7.75 feet; VLT Pond = 7.50 feet; Slot 2 Pond = 13.25 feet. No solution was transferred from the VLT Sediment Pond (VLTSP), the Phase 1 Pond, or from the Slot Sediment Pond (SSP) to the FMS Evaporation Pond. Solutions were transferred via gravity flow from the VLT and Phase III heap leach pads (HLPs) to the VLTSP, and from the Slot HLP to the Slot Pond. Approximately 49,693 gallons of drain-down solution were pumped from the leak detectors, and approximately 100,373 gallons of solution have been pumped from the leak detectors since January 1, 2011. FMS monitoring data are attached.
- FMS liners were inspected on a Site-wide basis and a list of locations for repair was developed.
- Planning continued for the installation of additional security lighting, heating/air-conditioning, insulation, and a water heater for the Sample Support Building.
- The road leading to the Core Storage Building was repaired.

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## **March 2011 Activities - Continued**

### Other Site Activities

- Quatterra personnel worked in their core storage area.
- B.V. Nevada personnel continued demolition and salvage activities, including the demolition of the Quonset Building and Warehouse Annex.
- Tom Dunkelman (EPA), Joe Sawyer (NDEP) and personnel from Discovery Carbon, Comstock Seed, and the Desert Research Institute assessed re-vegetation of cover materials on March 17.

### Site Characterization

- Site-wide monthly groundwater elevation measurements were obtained March 28-31. Monthly surface water sampling was conducted on March 29.
- A pit lake water elevation of 4224.51 feet amsl was recorded on March 31, 2011 from the pressure transducer, an increase of 0.502 feet since February 28, 2011. The pit lake elevation has risen 3.369 feet since March 31, 2010.
- Continued meteorological monitoring at the AM-6 location including wind speed/direction, temperature, relative humidity, barometric pressure, precipitation and solar radiation.
- Four additional residences were added to the Bottled Water Program during March 2011: (DW-163, DW-180, DW-181, and DW-182). DW-102 declined participation in the Bottled Water Program (owner receives bottled water for DW-123, located on the same lot at the same address. DW-150 decided not to accept bottled water (after initially accepting), as an RO system was installed for this residence (sampling frequency changed back to quarterly from semi-annual basis).
- The following changes were made to the domestic well program: two residences (DW-66 and DW-67) requested to be taken out of the DWMP.
- Continued compilation of monitoring data for inclusion in the 2010 Annual Site-Wide Groundwater Monitoring Report.
- Continued the compilation of field and laboratory data for inclusion in the Data Summary Report for the 2010 Well Installation and Ag Field Characterization investigations.
- Submitted the Draft On-Site Monitor Well Installation Work Plan on March 15.
- Initiated the evaluation of available hydrologic tracer data obtained pursuant to the 2010 Well Installation and Ag Field Characterization field investigations, along with historic data, and started the compilation of data for the Background Groundwater Quality Assessment for inclusion in a future Background Investigation Work Plan, as requested by EPA.
- Continued routine database management activities.
- Continued Site wildlife surveys, data management and wildlife observation reports.

### AOC Removal Actions

- Perimeter air quality monitoring station operations, in support of the removal actions, terminated on March 1.
- A final version of the Anaconda Evaporation Ponds Removal Action Completion Report on March was uploaded to the EPA library on March 4, per EPA request.
- The Draft Transite Pipe and Process Areas Radiological Materials Removal Action Completion Reports were submitted on March 2 and 28, respectively.
- The Data Summary Report for the Characterization of Potential Cover Materials was submitted on March 18.

## **Planned April/May 2011 Activities**

### Site Characterization

- Continue Site wildlife surveys, maintenance of wildlife observation data and preparation of wildlife observation reports.
- Continue groundwater elevation and pit lake level monitoring, surface water sampling, and Site meteorological monitoring.
- Re-submit the Inhalation Pathway HHRA Report, previously submitted on February 25, to include missing tables and select pages with text edits.
- Continue the compilation of data for inclusion in the 1Q 2011 monitor well and domestic well monitoring reports.
- To improve sampling efficiency, conduct additional development of a select number of deeper monitor wells installed as part of the 2010 Monitor Well and Ag Fields Work Plans.
- Continue to compile data, and initiate the preparation of the data summary report for the 2010 Monitor Well and Ag Fields Work Plans.
- Continue the evaluation of available hydrologic tracer data and the compilation of all available data for the Background Groundwater Quality Assessment for inclusion in a future Background Investigation Work Plan.
- Continue to supervise aquifer solids testing activities at Hazen Research Labs.
- Discuss the 2011 On-Site Monitor Well Work Plan with EPA, as appropriate.
- Discuss with EPA the results, and next phase, of geophysical surveys and related sub-surface utility investigations.
- Attend a Yerington Public Meeting on April 21.

### AOC Removal Actions

- Finalize the Transite Pipe Removal Action Completion Report. Pending EPA review, finalize the Process Areas Radiological Materials Removal Action Completion Report.
- Complete and submit the 2010 Annual FMS O&M Report.
- Pending EPA review, discuss the results presented in the Data Summary Report for the Characterization of Potential Cover Materials and the next phase of removal actions for the lined and unlined evaporation ponds.
- Discuss with EPA the re-positioning of the propane cannon located adjacent to the FMS (EPA 4-acre) pond to avoid potential operational issues caused by salt spray during high winds.

If you have any questions or comments about the March 2011 monthly report, please contact me at (714) 228-6774 or via e-mail at [jack.oman@bp.com](mailto:jack.oman@bp.com).

Sincerely,



Jack Oman  
Project Manager

Attachments

cc: Dave Seter, EPA – via electronic mail  
Jacquelyn Hayes, EPA – via electronic mail  
Roberta Blank, EPA – via electronic mail  
Andrew Helmlinger, EPA – via electronic mail  
Tom Dunkelman, EPA – via electronic mail  
Joe Sawyer, NDEP – via electronic mail  
Tom Olsen, BLM – via electronic mail  
Dan Newell, City of Yerington – via electronic mail  
Phyllis Hunewill – via electronic mail  
Virgil Arellano, Lyon County Commissioner – via electronic mail  
Richard Faber, Lyon County Facilities Engineering – via electronic mail  
Tom Grady, Nevada State Assembly – via electronic mail  
Justin Whitesides, YPT – via electronic mail  
Chairman Emm, YPT – via electronic mail  
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